

IN THE CLAIMS

1. (currently amended) A method for ~~diagnosing a synovial disease or~~ monitoring the evolution of a synovial disease, comprising:

- i) bringing a biological sample from an individual into contact, *in vitro*, with a means for measuring a specific marker for synovial disease, said specific marker being ~~glycosylated~~diglycosylated pyridinoline;
- ii) determining the level of the specific marker;
- iii) comparing the level of the marker with a reference level of the specific marker ~~representing the absence of the disease or~~ representing a predetermined stage in the disease, the level of the marker with respect to the reference level indicating the presence of or evolution of the synovial disease.

2. (cancelled)

3. (withdrawn) A method for monitoring the evolution of an osteoarticular disease, comprising:

- i) bringing a biological sample from an individual into contact, *in vitro*, with a means for measuring a specific marker for synovial disease;
- ii) determining the level of the specific marker;
- iii) optionally, comparing the level of the marker with a reference level representing a predetermined stage in the disease, the level of the marker with respect to the reference level indicating the evolution of the synovial disease.

4. (withdrawn) A method for determining a prognosis of evolution towards an osteoarticular disease or towards a predetermined stage in osteoarticular disease, comprising:

- i) bringing a biological sample from an individual into contact, *in vitro*, with a means for measuring a specific marker for synovial disease;

- ii) determining the level of the specific marker;
- iii) optionally, comparing the level of the marker with a reference level and deducing a prognosis of evolution towards an osteoarticular disease or towards a stage in osteoarticular disease from that comparison.

5. (withdrawn) The method of claim 3, wherein said individual has an osteoarticular disease or is susceptible of developing an osteoarticular disease.

6. (withdrawn) A method for determining the efficacy of a drug administered to an individual for the treatment of an osteoarticular disease, comprising:

- i) bringing a biological sample from an individual under treatment into contact, *in vitro*, with a means for measuring a specific marker for synovial disease;
- ii) determining the level of the specific marker;
- iii) optionally, comparing the level of the marker with a reference level representing a predetermined stage of the disease, the level of the marker with respect to the reference level indicating the evolution of the synovial disease, and therefore the degree of efficacy of the treatment.

7. (withdrawn) A method for determining the toxicity associated with an osteoarticular or synovial disease of a drug intended to treat a disease, comprising:

- i) bringing a biological sample from an individual into contact, *in vitro*, with a means for measuring a specific marker for synovial disease;
- ii) determining the level of the specific marker;
- iii) optionally, comparing the level of the marker with a reference level representing the presence of or a predetermined stage in the disease, the level of the marker with respect to the reference level indicating the degree of disease and therefore the degree of

toxicity associated with a synovial or osteoarticular disease.

8. (withdrawn) A method for early diagnosis of an osteoarticular disease, comprising:

- i) bringing a biological sample from an individual into contact, *in vitro*, with a means for measuring a specific marker for synovial disease;
- ii) determining the level of the specific marker;
- iii) optionally, comparing the level of the marker with a reference level representing the presence of or a predetermined stage of the disease, the level of the marker with respect to the reference level indicating the actual or potential presence of synovial disease.

9. (withdrawn) A method for diagnosing or monitoring synovial collagen degradation, comprising:

- i) bringing a biological sample from an individual into contact, *in vitro*, with a means for measuring a specific marker for synovial disease;
- ii) determining the level of the specific marker;
- iii) optionally, comparing the level of the marker with a reference level representing the base or normal level for synovial collagen degradation, the level of the marker with respect to the reference level indicating normal or pathological degradation.

10. (cancelled)

11. (cancelled)

12. (withdrawn) The method of claim 3, wherein said osteoarticular disease is inflammatory rheumatism, a metabolic arthropathy, degenerative rheumatism, rheumatoid arthritis, spondylarthritis, gout, chondrocalcinosis or arthrosis.

13. (previously presented) The method of claim 1, wherein said predetermined stage in the synovial disease is a destructive or non-destructive stage.

14. (original) The method of claim 1, wherein said determination of the level of the specific marker for synovial disease is carried out by an immunological technique, by immunoassay, by fluorescence, by ultraviolet spectroscopy or by electrochemical detection.

15. (original) The method of claim 14, wherein said immunological technique is a technique employing specific monoclonal or polyclonal antibodies, an ELISA technique, an immuno-enzymatic technique, an immunofluorescent technique, a radio-immunological technique or a chemo-immunological technique.

16. (previously presented) The method of claim 1, wherein the level of the specific marker for synovial disease is determined by an High Performance Liquid Chromatography technique.

17. (currently amended) The method of claim ~~16~~¹, wherein said reference level is selected to be in the range from about 5 nmole/nmole creatinin to about 9 nmole/nmole creatinin.

18. (original) The method of claim 1, in which the level of the specific marker for synovial disease is determined in a body fluid.

19. (original) The method of claim 18, in which the body fluid is selected from blood, serum, plasma, urine, saliva, sweat or synovial fluid.

20. (cancelled)

21. (cancelled)

22. (withdrawn) A method for possible early diagnosis or for monitoring the evolution of an osteoarticular disease involving the degradation of synovial disease, characterized by:

- i) bringing a biological sample from an individual into contact, in vitro, with a means for measuring a specific marker the level of which alone reflects the degree of synovial collagen degradation;
- ii) determining the level of the specific marker.

23. (withdrawn) The method of claim 22, wherein said specific marker is diglycosylated pyridinoline.

24. (currently amended) A kit for ~~diagnosing or~~ monitoring the evolution of a synovial disease, comprising at least one means for measuring a specific marker for synovial disease and a mention of ~~the~~ a reference level ~~representing the absence of the disease or~~ representing a pre-determined stage of the disease, said specific marker for synovial disease being ~~glycosylated~~ diglycosylated pyridinoline.

25. (withdrawn) A kit for diagnosing or monitoring the evolution of an osteoarticular disease, comprising at least one means for measuring a specific marker for synovial disease and a mention of the reference level representing the absence of the disease or representing a predetermined stage in the disease.

26. (withdrawn) A kit for determining a prognosis of evolution towards an osteoarticular disease or towards a stage in osteoarticular disease, comprising at least one means for measuring a specific marker for synovial disease and a mention of the reference level representing the prognosis.

27. (withdrawn) A kit for determining the efficacy of a drug administered to an individual for the treatment of an osteoarticular disease, comprising at least one means for measuring a specific marker for synovial disease and a mention of a reference level representing a degree of efficacy of said drug.

28. (withdrawn) A kit for determining the toxicity of a drug intended to treat a disease, comprising at least one means for measuring a specific marker for synovial disease and a mention of a reference level representing a level of toxicity for said drug.

29. (cancelled)

30. (cancelled)

31. (withdrawn) An antibody that can specifically recognise glucosyl-galactosyl-pyridinoline.

32. (cancelled)

33. (new) A method for diagnosing a synovial disease comprising:

- i) bringing a biological sample from an individual into contact, *in vitro*, with a means for measuring a specific marker for synovial disease, said specific marker being diglycosylated pyridinoline;
- ii) determining the level of the specific marker;
- iii) comparing the level of the marker with a reference level of the specific marker representing the absence of the disease, the level of the marker with respect to the reference level indicating the presence of the synovial disease.

34. (new) The method of claim 33, wherein said determination of the level of the specific marker for synovial disease is carried out by an immunological technique, by immunoassay, by fluorescence, by ultraviolet spectroscopy or by electrochemical detection.

35. (new) The method of claim 34, wherein said immunological technique is a technique employing specific monoclonal or polyclonal antibodies, an ELISA technique, an immuno-enzymatic technique, an immunofluorescence technique, a radio-immunological technique or a chemo-immunological technique.

36. (new) The method of claim 34, wherein the level of the specific marker for synovial disease is determined by an High Performance Liquid Chromatography technique.

37. (new) The method of claim 34, wherein said reference level is selected to be in the range from about 5 nmole/nmole creatinin to about 9 nmole/nmole creatinin.

38. (new) The method of claim 34, in which the level of the specific marker for synovial disease is determined in a body fluid.

39. (new) The method of claim 38, in which the body fluid is selected from blood, serum, plasma, urine, saliva, sweat or synovial fluid.

40. (new) A kit for diagnosing a synovial disease, comprising at least one means for measuring a specific marker for synovial disease and a mention of a reference level representing the absence of the disease, said specific marker for synovial disease being diglycosylated pyridinoline.